## Rymer, Edwina

**From:** Dellinger, Philip

**Sent:** Wednesday, February 04, 2015 12:39 PM

To: Honker, William
Cc: Brown, Jamesr
Subject: RE: News of interest!

**Attachments:** Seis for Austin GWPC 2-4-15.pptm; Abstract for GWPC - Minimizing and Managing

Potential Impacts of.docx

Bill, attached is the presentation I plan to give in Austin next week. It summarizes our strategy for developing the report and the primary findings we want to cover. The engineering approach is singled out because it had never been applied to this problem before and it has a lot of value. On the third slide you will see the state participants on the Working Group, the group that actually did the study. Specific examples of state support: Most of the states on the Working Group have moved to requiring daily operational data for suspected wells. This is something we pressed early on because of engineering approaches using operation data. Oklahoma – recommended specific procedures for conducting a reservoir test in some of the early disposal wells suspected of inducing earthquakes. They also requested some assistance at our meeting with them this past October. Also, ODEQ asked us to look at a Class I nonhaz permit application for a new facility in an active seismic area. We looked at it and tested our decision model. It worked well. We recommended more site data, but in the end, told ODEQ – if you permit the well, do it with permitting contingencies for addressing earthquakes that occur within a defined area around the site. ODEQ has followed this recommendation. Ohio – After the Youngstown quakes, we immediately offered technical support to the Ohio oil and gas agency and they took us up on the offer. Susie and Ken did some reservoir analysis for them that we understand gained recognition for the Agency by the Ohio Governor. A point of caution. State agencies are reluctant (and probably sensitive) to acknowledge and/or associate with EPA on this topic. We have seen or heard this from multiple sources. I therefore suggest that you mention our support in a generic sense if you mention it. I spoke with HQ today. The report is still expected to be released prior to Peter G's presentation at GWPC Tuesday of next week. There is a briefing scheduled for Stan Meiburg tomorrow. I'm also going to forward you some public info prepped by HQ for release of the report.

From: Honker, William

Sent: Wednesday, February 04, 2015 10:22 AM

**To:** Dellinger, Philip **Cc:** Brown, Jamesr

Subject: FW: News of interest!

Jim/Phil – can you give me some talking points on the Seismicity Report and how we've worked with the states in R6 on seismicity issues? I've got a presentation in Houston Tuesday, and I'd like to include it, if possible. What day is the report scheduled to be released at GWPC?

Bill

William K. Honker, P.E. Director, Water Quality Protection Division (6WQ) EPA Region 6 Dallas, TX 214-665-3187 From: Hildebrandt, Kurt

Sent: Wednesday, February 04, 2015 10:15 AM

To: Overbay, Michael; Dellinger, Philip; Brown, Jamesr; R6 6WQ-SG; Lawrence, Rob; Hernandez, Jessica; Gillespie, David;

Mayer, Rebecca; Garcia, David; Honker, William; Saunders, Jerry; Lane, Willie

Cc: Bergman, Ronald; Green, Holly; Bates, William

Subject: RE: News of interest!

Thanks for the updates. I already had sent this news to Bill Bates but since folks are sharing, I'll pass this bit of internal news along.

We briefed our RA yesterday on the Induced Seismicity paper and it went well. While the main focus of the time was spent going over the EPA Induced Seismicity Technical Recommendations report, we did talk about the Kansas Induced Seismicity Task Force and how what that group has done folds in with the EPA report. I said that both products complement each other and that the "stop light" approach that is being used by Kansas to assess and address induced seismicity seems reasonable.

The RA seemed very aware of the testimony that was given recently by the Kansas Induced Seismicity Task Force to the state legislature and asked if the state was planning actions to gather additional data related to a specific injection well or set of injection wells and I said I was not aware of any data gathering like that at this time but that additional measurements continue to be taken by the seismic arrays of a more general nature. So news that Oklahoma shutting-in an injection well near the Kansas border is timely. The RA also asked how the UIC regulations could be used if it was discovered that a particular disposal well was suspected of triggering a seismic event. So we quickly went into that.

I think that the briefing went well and the RA left with a better understanding of the situation. However, he did keep pressing for when the EPA paper was going to come out. I told him that we hope to have it out in advance of the GWPC meeting next week since we are scheduled to talk about it there.

From: Overbay, Michael

Sent: Wednesday, February 04, 2015 10:02 AM

To: Dellinger, Philip; Brown, Jamesr; R6 6WQ-SG; Lawrence, Rob; Hernandez, Jessica; Gillespie, David; Mayer, Rebecca;

Garcia, David; Honker, William; Saunders, Jerry; Lane, Willie

Cc: Bergman, Ronald; Green, Holly; Bates, William; Hildebrandt, Kurt

Subject: RE: News of interest!

I heard from folks in Ada Lab this morning that OCC shut-in an injection well in Alfalfa County (on the Kansas border) yesterday.

Here is a Tulsa World story on it.

<a href="http://www.tulsaworld.com/news/local/state-orders-injection-well-shut-down-after-northwestern-oklahoma-earthquake/article\_4184d155-d9b2-523d-a8d5-033174ff8584.html?mode=story">http://www.tulsaworld.com/news/local/state-orders-injection-well-shut-down-after-northwestern-oklahoma-earthquake/article\_4184d155-d9b2-523d-a8d5-033174ff8584.html?mode=story</a>

Michael Overbay, P.G. Regional Ground Water Center Coordinator US Environmental Protection Agency, Region 6 (214)665-6482

From: Dellinger, Philip

Sent: Wednesday, February 04, 2015 9:54 AM

To: Brown, Jamesr; R6 6WQ-SG; Lawrence, Rob; Hernandez, Jessica; Gillespie, David; Mayer, Rebecca

Cc: Bergman, Ronald; Green, Holly; Bates, William; Hildebrandt, Kurt

Subject: FW: News of interest!

FYI. Media and public attention on earthquakes continues to grow. Channel 8 is airing a week-long series of segments on earthquakes on their 10:00 news available at website below (click below then go to *earthquakes* on left column), Oklahoma interest below that.

## http://www.wfaa.com/

**From:** Angela Spotts [mailto:angelaspotts@hotmail.com]

Sent: Wednesday, February 04, 2015 9:37 AM

**To:** Dellinger, Philip **Subject:** News of interest!

Morning! hope you are doing great!

Several news stories for your morning entertainment!

http://www.tulsaworld.com/news/local/state-orders-injection-well-shut-down-after-northwestern-oklahoma-earthquake/article 4184d155-d9b2-523d-a8d5-033174ff8584.html

Ziva Branstetter is doing a 3 piece series starting Sun. in the Tulsa World. Mark and many others interviewed for this one!

Our signs are being stolen so we had great coverage on that and the city council planning meeting from last night 1st of 2.

Signs....

http://kfor.com/2015/02/03/fracking-debate-turning-nasty-in-payne-county/

http://www.news9.com/story/28016456/anti-fracking-signs-vandalized-in-payne-county

We also made KOCO about signs being stolen and the city meeting.

This is about the meeting....

http://www.news9.com/story/28018210/stillwater-officials-consider-limit-on-oil-drilling-operations

We are doing what we can to ramp this up! Have a nice day! Angela